



Disaster and Emergency Management Resources

Extreme Heat Disorders

Heat Cramps

- **Definition:** Heat cramps are muscular pains and spasms due to heavy exertion in the heat. Although heat cramps are the least severe of the heat disorders, they are often the first signal that the body is having trouble with the heat.
- **Symptoms :** Painful spasms usually in leg and abdominal muscles.
- **First Aid:** Get the person to a cooler place and have him or her rest in a comfortable position. Lightly stretch the affected muscle and replenish fluids. Give a half glass of cool water every 15 minutes, but discontinue if nausea occurs. Apply firm pressure on cramping muscles or gently massage to relieve spasms.

Heat Exhaustion

- **Definition:** Heat exhaustion typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing less blood to flow to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.
- **Symptoms :** Cool, moist, pale, or flushed skin; heavy sweating; headache; nausea or vomiting; dizziness; and exhaustion. Body temperature may be normal, or it is likely to be rising.
- **First Aid:** Get victim to lie down in a cool place. Loosen clothing. Apply cool, wet cloths. Fan or move victim to air conditioned place. Give sips of water. If nausea occurs, discontinue. If vomiting occurs, seek immediate medical attention.

Heat Stroke (Sun Stroke)

- **Definition:** Heat stroke is life-threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly.
- **Symptoms :** High body temperature (106+). Hot, dry skin. Rapid, strong pulse. Possible unconsciousness. Victim will likely not sweat.
- **First Aid:** Heat stroke: Heat stroke is a life-threatening situation. Help is needed fast. Call 9-1-1 or your local emergency number. Move the person to a cooler place. Quickly cool the body. Immerse victim in a cool bath or wrap wet sheets around the body and fan it. Watch for signals of breathing problems. Keep the person lying down and continue to cool the body any way you can. If the victim refuses water, is vomiting, or shows changes in the level of consciousness, do not give anything to eat or drink.

Heat Rash

- **Definition:** Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It can occur at any age but is most common in young children.
- **Symptoms:** Heat rash looks like a red cluster of pimples or small blisters. It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.
- **First Aid:** The best treatment for heat rash is to provide a cooler, less humid environment. Keep the affected area dry. Dusting powder may be used to increase comfort, but avoid using ointments or creams - they keep the skin warm and moist and may make the condition worse.

Adapted from resource material developed by the National Center for Environmental Health, CDC